Rail-Highway Crossing Safety Projects

Rail-Highway crossing safety projects are primarily funded using Federal Highway Administration (FHWA) Surface Transportation Program (STP) Safety funds. These funds are about one-half of the ten percent of STP funds that must be set aside for constructing safety project under Title 23 United States Code (U.S.C.) Section 130. The rail-highway crossing safety projects program is administered/coordinated by the Multimodal Operations Division of the Missouri Department of Transportation (MoDOT).

State Grade Crossing Safety Fund

The Missouri legislature created a State Grade Crossing Safety Account supported by a tax on motor vehicle licensing. This fund, created to upgrade the safety of existing rail-highway crossings is used to provide the 20 percent matching funds for the program. The total amount contributed yearly by this state fund is approximately \$1.0 million. It is administered by the Missouri Department of Economic Development's Motor Carrier and Railroad Safety Division (DED/MCRS).

Rail-Highway Crossing Safety Program

Overall Purpose – The overall purpose of this program is to improve safety at rail-highway grade crossing to both railroads and highway users. Under this program, projects to improve crossing safety generally are funded at 80 percent federal and 20 percent state of the total cost. Project improvements typically done are to install railroad crossing signal devices, circuitry, and surfaces depending on the diagnostic review recommendations. Projects can also provide improvements on adjacent highway approaches to yield better sight distance toward crossings or to install barricades for closures.

Diagnostic Reviews and Procedures – A Joint Diagnostic Team performs yearly reviews on eligible rail-highway crossings. The diagnostic team consists of one MoDOT representative, a member of the DED/MCRS, one or more railroad representatives, and one or more members of a local public works agency, county and/or city. This team evaluates the railroad crossing to determine the best solution to improve safety. Statewide priorities are developed for projects using these funds utilizing a measure called an "Exposure Index" (EI) which involves a number of factors, including the volume of vehicles, the volume of trains, vehicle speed, train speed, and sight distance. A brief explanation of how the Exposure Index is computed is given at the end of this section.

Program General Schedule – A general schedule for programming, development and implementation of rail-highway improvement projects is as follows. This schedule usually involves four phases over a three-year period.

Rail-Highway Crossing Safety Projects General Schedule By Phase

I. Programming (About seven months duration)

- 1. The Missouri Department of Economic Development, Division of Motor Carrier and Railroad Safety (DED/MCRS) and the Missouri Department of Transportation (MoDOT) set criteria and develop a preliminary priority list by March 1.
- 2. Diagnostic field reviews are to be completed by June 1.
- 3. MoDOT and DED/MCRS develop project list by June 15.
- 4. MoDOT submits urban project list of crossing improvements to the Metropolitan Planning Organizations.
- 5. Rural project list is submitted to the MoDOT Office of Transportation Program Management for listing on the State Transportation Improvement Program (STIP).
- 6. MoDOT obligates federal funds with the Federal Highway Administration (FHWA) when funds are available (usually October 1).

II. Preliminary Engineering and Agreement Processing (About seven months duration)

- 1. MoDOT sends an agreement for installation of warning devices to the railroad with a copy of the diagnostic review form, and MoDOT authorizes the railroad to perform engineering (15 days after obligation).
- 2. Railroad returns the agreement with the plan and cost estimate. Copies are sent to DED/MCRS with the plan and cost estimate (120 calendar days from preliminary engineering date).
- 3. MoDOT and DED/MCRS review the plan and cost estimate.
- 4. MoDOT sends the agreement to the local agency (if crossing is on a state route, skip to Step 6).
- 5. The local agency executes the agreement and returns to MoDOT (30 days).
- 6. MoDOT executes the agreement and distributes fully executed agreements.

- 7. DED/MCRS staff files an application with DED/MCRS Administrative Law Judge (ALJ) (15 days).
- 8. All parties respond to the application and waive oral hearing if project is acceptable.
- 9. DED/MCRS ALJ issues an order to install the devices (30 days)

III. Construction and Inspection (About 12 months duration)

- 1. MoDOT authorizes the railroad to order material and to proceed with construction (5 days).
- 2. Railroad notifies MoDOT district area engineer five days prior to beginning field work.
- 3. Railroad installs warning devices. MoDOT inspects work during installation.
- 4. DED/MCRS performs final inspections within 90 days after project completion.

IV. Billing (About 10 months duration)

- 1. Railroad transmits bill to MoDOT and DED/MCRS within 8 months after project completion.
- 2. DED/MCRS audits and issues payment from the State Grade Crossing Safety Account (60 days).
- 3. MoDOT issues payment within 60 days after receiving bill and audits at a later date.

V. Summary: Total Project Duration

Average typical project total elapsed time from Programming through Billing final payment is three years.

General Project Funding Policy and Priority – Usually projects are funded with 80 percent federal and 20 percent state funds.

Rail-Highway Crossing Safety Projects General Funding Policy And Priority For Improvements

1. Passive To Active Warning Devices (Exposure Index (EI) \geq 1000)

80% Federal Highway Administration (FHWA) Surface Transportation Program (STP) Safety Funds 20% Missouri Department of Economic Development, Division of Motor Carrier and Railroad Safety (DED/MCRS) Grade Crossing Safety Account (GCSA)

2. Upgrades Due To Closures

FUNDING TO BE NEGOTIATED

• If none of the remaining crossings meets the funding criteria then a maximum of 50% to be funded with state and federal funds

3. Device Upgrades (EI > 5000) And 5 Years Old

FUNDING TO BE NEGOTIATED

4. Passive Corridor Improvements

80% Material FHWA STP Funds 20% Material GCSA Funds

5. Upgrades Due To High Accident Studies

(Study performed on crossings with 3 accidents in 5 years) FUNDING TO BE NEGOTIATED

6. Circuitry Upgrades (EI > 5000) And 10 Years Old

FUNDING TO BE NEGOTIATED

7. Signal Enhancement Program

FUNDING TO BE NEGOTIATED

8. Surface Improvements

FUNDING TO BE NEGOTIATED

Note: Policy and Priority Items Last Revised January 6, 2000

Rail-Highway Crossing Improvement Project Lists

The following four lists contain the rail-highway crossing improvement projects selected for funding under this program for both the present year and previous years. The rail-highway crossing locations are sorted by the MoDOT Districts. The lists also provide an indication of project status. What each list represents is defined as follows.

- List 1 Projects where the agreements have been executed and an order for the improvements has been issued. The order gives the railroad companies one (1) year for the installation to be completed.
- **List 2** Projects that were funded in Fiscal Year 2000 STIP, or a previous year, but the final design is not complete. These projects will be ordered within the next year.
- **List 3** Projects still in the Preliminary Design Phase.
- **List 4** Additional projects to be funded in Fiscal Year 2001.

Estimated federal funding for Fiscal Year 2001 will be \$3,998,000. This will cover 30 - 35 highway/rail crossing improvement locations. The exact locations have not been determined.

Railroad Company Glossary

- **BNSF** The Burlington Northern and Santa Fe Railway Company
- GWWR Gateway Western Railway Company (Part of Kansas City Southern Railway Company)
- **KCS** Kansas City Southern Railway Company
- NS Norfolk Southern Railway Company
- UP Union Pacific Railroad Company (Includes Missouri Pacific and Southern Pacific)

Improvement Type Definitions

Circuitry Upgrade (C.U.) – Upgrade existing circuitry to redundant constant warning time circuitry.

Close – Install barricades and necessary work to close/remove existing crossing.

Device Upgrade (D.U.) – Upgrade existing circuitry to redundant constant warning time circuitry and add gates at the crossing.

Grade Separation – Construct a grade separation structure to eliminate conflicts at crossings;

New Surface – Install new rubberized or concrete surface at crossings to reduce roughness.

Passive to Active (P to A) – Install active warning devices which includes flashing light signals and gates with redundant constant warning time circuitry at crossings which currently have only passive warning devices (i.e. crossbucks).

Exposure Index Computation Procedure

The **Exposure Index** (*EI*) is a two-part equation. The first is a relationship of train-vehicular characteristics called a "Traffic Index Factor". The second is a relationship of "Required-to-Actual" highway approach sight distances called a "Sight Distance Factor".

Traffic Index Factor

The **Traffic Index** (TI) is the major component of this Exposure Index. It is determined as follows:

$$TI = (T) (Ts) (V) (Vs) (10^{-4})$$

Where: T = number of daily train movements

Ts = maximum allowable train speed

V = average daily traffic count

Vs = normal vehicular operating speed *

Sight Distance Factor

The **Required Sight Distances** (RSD) used are found in Table 20 "Required Design Sight Distances---" as extracted from the Highway Research Board <u>Report 50</u>.

To calculate the **Sight Distance Obstructions** (SDO), ** subtract the **Actual Sight Distance** from the **Required Sight Distance**. **Percent of Obstruction** (P) is determined by dividing the **Sight Distance Obstruction** by the **Required Sight Distance**.

$$PO = SDO / RSD$$

The Percent of Obstruction (P) is multiplied by the Traffic Index Factor (TI) to obtain the Sight Distance Factor.

PO (TI)

Exposure Index

Exposure Index (EI) is computed by totaling the Traffic Index Factor (TI) and the Sight Distance Factor.

$$EI = TI + PO (TI)$$

- * Not to exceed posted maximum allowable speed.
- ** An obstruction is included in the Sight Distance Obstruction only if it occurs within the area of the Required Sight Distance.

LIST 1: CROSSINGS IN THE CONSTRUCTION PHASE Implementation Ordered

DISTRICT 1: (NONE)

			Ι	DISTRICT 2:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Macon	BNSF	005 094V		LaPlata	CR 515/Iceberg	P to A	\$100,000
Randolph	NS	480 734Y		Moberly	Ault St.	P to A	\$100,000
			Ι	DISTRICT 3:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Knox	BNSF	005 063W		Baring	County Rd. 112	P to A	\$100,000
Lincoln	BNSF	072 869E		Winfield	Route N	D.U.	\$100,000
Marion	NS	480 629X		Rensselaer	County Rd. 431	P to A	\$100,000
Pike	BNSF	078 439P		Louisiana	S. Carolina St.	P to A	\$100,000
Pike	BNSF	078 440J		Louisiana	Georgia St.	D.U.	\$100,000
			Ι	DISTRICT 4:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Jackson	GWWR	293 584D	Kansas City	Blue Springs	10 th St.	C.Ū.	\$100,000
Jackson	GWWR	293 585K	Kansas City	Blue Springs	Main St.	D.U.	\$100,000
Jackson	GWWR	293 587Y	Kansas City	Blue Springs	Woods Chapel Rd.	D.U.	\$100,000
Jackson	UP	422 984E	Kansas City	Kansas City	Holmes Rd.	C.U.	\$100,000

DISTRICT 5: (NONE)

LIST 1: CROSSINGS IN THE CONSTRUCTION PHASE Implementation Ordered

	DISTRICT 6:								
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate		
Franklin	BNSF	664 343R	St. Louis	Pacific	Jefferson St.	P to A	\$130,000		
Jefferson	UP	446 451M	St. Louis	Desoto	Knorpp Rd.	P to A	\$100,000		
Jefferson	BNSF	663 848U	St. Louis	Arnold	Arnold-Tenbrook	D.U.	\$100,000		
St. Charles	BNSF	068 792M	St. Louis	Seeburger	Blasé Station Rd.	C.U.	\$100,000		
St. Charles	NS	483 539J	St. Louis	Foristell	Seeger Ln.	P to A	\$125,000		
St. Louis City	UP	424 882T	St. Louis	St. Louis	Germania St.	D.U.	\$100,000		
DISTRICT 7:									
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate		
Barton	BNSF	669 998U		Lamar	Gulf St.	D.U.	\$100,000		
Jasper	KCS	330 028B		Waco	Kafir Rd.	P to A	\$100,000		
Jasper	KCS	330 029H		Waco	N. Roney St.	Close	\$ 50,000		
Jasper	KCS	330 039N	Joplin	Joplin	Elk Rd.	D.U.	\$100,000		
			т	DISTRICT 8:					
Country	RR	Cuassings	MPO		Doodway	Improvement	Estimate		
County Greene	BNSF	Crossings 664 099W		City Springfield	Roadway Packer Rd.	Improvement D.U.	\$100,000		
Greene	BNSF	664 100N	Springfield Springfield	Springfield	Packer Rd.	D.U.	\$100,000		
Greene	BNSF	664 103J	Springfield	Springfield	Pythian St.	D.U.	\$100,000		
Greene	BNSF	664 105X	Springfield	Springfield	Catalpa	D.U.	\$100,000		
Greene	BNSF	673 252J	Springricia	Strafford	Farm Rd. 249	P to A	\$100,000		
Greene	BNSF	673 275R		Republic	Farm Rd. 170	P to A	\$100,000		
Greene	BNSF	673 283H		Republic	Farm Rd. 194	P to A	\$100,000		
Webster	BNSF	667 628M		Fordland	County Rd. 449	P to A	\$100,000		
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LIST 1: CROSSINGS IN THE CONSTRUCTION PHASE Implementation Ordered

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				District 7.			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Howell	BNSF	667 842S		Pomona	County Rd. 1540	P to A	\$100,000
				DISTRICT 10:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Dunklin	UP	787 950Ū		Malden	Broadwater St.	C.U.	\$100,000
Pemiscot	BNSF	665 541P		Hayti	Cleveland St.	P to A	\$100,000
Perry	BNSF	663 936E		McBride	Main	P to A	\$100,000

DISTRICT 1: (NONE)

DISTRICT 2: (NONE)

DISTRICT 3:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Montgomery	NS	483 597E		Montgomery City	Mitchell Rd.	Close – build rdwy.	\$100,000
Montgomery	NS	483 598L		Montgomery City	Walker St.	D.U. – impr. Rdwy.	\$200,000
Montgomery	NS	483 599T		Montgomery City	Spinsby St.	C.U.	\$100,000
Montgomery	NS	483 602Y		Montgomery City	Third St.	Close	\$0
Montgomery	NS	483 603F		Montgomery City	Seventh St.	D.U.	\$100,000
Montgomery	NS	483 604M		Montgomery City	Route B	D.U.	\$100,000
Montgomery	NS	916 969U		Montgomery City	Niedergerke Dr.	P to A	\$100,000

DISTRICT 4:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Cass	UP	441 983Y	Kansas City	Pleasant Hill	175 th St.	P to A	\$100,000
Clay	UP	605 516T		Moseby	MO Route 92	D.U.	\$130,000
Platte	BNSF	095 197R		Armour	Stanton Rd.	P to A	\$130,000
Ray	BNSF	005 352X		Camden	Missouri St.	D.U.	\$100,000
Ray	BNSF	005 359V		Orrick	Sibley Rd.	P to A	\$100,000
Ray	NS	483 848W		Camden	Missouri St.	P to A	\$100,000

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KK	Crossings	MPO	City	Roadway	Improvement	Estimate	
UP	442 094Y		Dresden	Buckley Rd.	P to A	\$130,000	
UP	442 096M		Dresden	Hitaffer Rd.	Close	\$0	
UP	442 148C		Sedalia	Sellers	Close	\$0	
UP	442 149J		Sedalia	Rissler Rd.	Rdwy. Impr	\$ 60,000	
UP	442 152S		Smithton	Lamms Ln.	P to A	\$130,000	
UP	442 153Y		Smithton	Pony Path Rd.	Close	\$0	
UP	442 156U		Smithton	Selkin Rd.	Close	\$0	
DISTRICT 6:							
RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
MRS	854 663R	St. Louis	St. Louis	9 th N. of Dorcas	C.U.	\$100,000	
MRS	854 664X	St. Louis	St. Louis	Dorcas Busch Pl.	C.U.	\$100,000	
MRS	854 665E	St. Louis	St. Louis	Dorcas @ Broadway	C.U.	\$115,000	
DISTRICT 7:							
RR BNSF	Crossings 668 319D	MPO	City Pierce City	Roadway County Rd. 1050	Improvement P to A	Estimate \$100,000	
	UP UP UP UP UP UR RR MRS MRS MRS	UP 442 094Y UP 442 096M UP 442 148C UP 442 149J UP 442 152S UP 442 153Y UP 442 156U RR Crossings MRS 854 663R MRS 854 664X MRS 854 665E RR Crossings	UP 442 094Y UP 442 096M UP 442 148C UP 442 152S UP 442 153Y UP 442 156U RR Crossings MPO MRS 854 663R St. Louis MRS 854 664X St. Louis MRS 854 665E St. Louis MRS 854 665E St. Louis	UP 442 094Y Dresden UP 442 096M Dresden UP 442 148C Sedalia UP 442 149J Sedalia UP 442 152S Smithton UP 442 153Y Smithton UP 442 156U Smithton MRS 854 663R St. Louis St. Louis MRS 854 664X St. Louis St. Louis MRS 854 665E St. Louis St. Louis MRS 854 665E St. Louis St. Louis	UP 442 094Y Dresden Buckley Rd. UP 442 148C Sedalia Sellers UP 442 149J Sedalia Rissler Rd. UP 442 152S Smithton Lamms Ln. UP 442 153Y Smithton Pony Path Rd. UP 442 156U Smithton Selkin Rd. BRR Crossings MPO City Roadway MRS 854 663R St. Louis St. Louis 9th N. of Dorcas MRS 854 664X St. Louis St. Louis Dorcas Busch Pl. MRS 854 665E St. Louis St. Louis Dorcas @ Broadway BISTRICT 7: RR Crossings MPO City Roadway MRS 854 665E St. Louis St. Louis Dorcas @ Broadway BISTRICT 7: City Roadway BISTRICT 7: City Roadway	UP 442 094Y Dresden Buckley Rd. P to A UP 442 096M Dresden Hitaffer Rd. Close UP 442 148C Sedalia Sellers Close UP 442 149J Sedalia Rissler Rd. Rdwy. Impr UP 442 152S Smithton Lamms Ln. P to A UP 442 153Y Smithton Pony Path Rd. Close UP 442 156U Smithton Selkin Rd. Close BRR Crossings MPO City Roadway Improvement MRS 854 663R St. Louis St. Louis 9th N. of Dorcas C.U. MRS 854 664X St. Louis St. Louis Dorcas Busch Pl. C.U. MRS 854 665E St. Louis St. Louis Dorcas @ Broadway C.U. DISTRICT 7: RR Crossings MPO City Roadway Improvement DISTRICT 7: RR Crossings MPO City Roadway Improvement DISTRICT 7: RR Crossings MPO City Roadway Improvement	

DISTRICT 8: (NONE)

DISTRICT 9:

RR BNSF UP	Crossings 667 847B 446 429A	MPO	City Pomona Mineral Point	Roadway County Rd. 5120 Rainbow Springs	Improvement P to A Close – build rdwy.	Estimate \$130,000 \$100,000		
DISTRICT 10:								
RR	Crossings	MPO	City	Roadway	Improvement	Estimate		
UP	446 260C		Poplar Bluff	B St.	SEP	\$250,000		
UP	446 262R		Poplar Bluff	C. St.	Close	\$ 15,000		
UP	787 951B		Malden	Francis St.	C.U.	\$100,000		
BNSF	665 588K		Lilbourn	Route D	D.U.	\$130,000		
BNSF	665 589S		Lilbourn	Lewis St.	P to A	\$130,000		
BNSF	665 590L		Lilbourn	Dawson St.	Close	\$130,000		
BNSF	665 591T		Lilbourn	Phillips Ave.	P to A	\$100,000		
BNSF	665 592A		Lilbourn	Route U	D.U.	\$130,000		
BNSF	665 643H		Oran	Rt. W/Radcliff	D.U.	\$100,000		
BNSF	663 655C		Chaffee	Gray St.	P to A	\$130,000		
BNSF	663 965P		Chaffee	County Rd. 220	P to A	\$130,000		
	RR UP UP UP UP BNSF BNSF BNSF BNSF BNSF BNSF	RR Crossings UP 446 260C UP 446 262R UP 787 951B BNSF 665 588K BNSF 665 589S BNSF 665 590L BNSF 665 591T BNSF 665 643H BNSF 663 655C	RR Crossings MPO UP 446 260C UP 446 262R UP 787 951B BNSF 665 588K BNSF 665 589S BNSF 665 590L BNSF 665 591T BNSF 665 643H BNSF 663 655C	RR Crossings MPO City BNSF 667 847B Pomona UP 446 429A Mineral Point DISTRICT RR Crossings MPO City UP 446 260C Poplar Bluff UP 787 951B Malden BNSF 665 588K Lilbourn BNSF 665 589S Lilbourn BNSF 665 590L Lilbourn BNSF 665 592A Lilbourn BNSF 665 643H Oran BNSF 663 655C Chaffee	BNSF 667 847B Pomona Mineral Point Rainbow Springs	RR Crossings MPO City Roadway Improvement BNSF 667 847B Pomona County Rd. 5120 P to A UP 446 429A Mineral Point Rainbow Springs Close – build rdwy. DISTRICT 10: RR Crossings MPO City Roadway Improvement UP 446 260C Poplar Bluff B St. SEP UP 446 262R Poplar Bluff C. St. Close UP 787 951B Malden Francis St. C.U. BNSF 665 588K Lilbourn Route D D.U. BNSF 665 589S Lilbourn Lewis St. P to A BNSF 665 590L Lilbourn Dawson St. Close BNSF 665 592A Lilbourn Route U D.U. BNSF 665 643H Oran Rt. W/Radcliff D.U. BNSF 665 655C Chaffee Gray St. P to A		

DISTRICT 1: (NONE)

DISTRICT 2:

County	RR	Crossings MPO	City	Roadway	Improvement	Estimate
Randolph	NS	480 731D	Moberly	Gratz-Brown St.	P to A	\$100,000
Randolph	NS	483 678E	Clark	Route P/Main St.	D.U.	\$130,000
Randolph	NS	483 687D	Moberly	Prison Rd.	D.U.	\$130,000
Randolph	NS	483 689S	Moberly	Urbandale Rd.	C.U.	\$130,000
Randolph	NS	483 691T	Moberly	E. McKinsey St.	C.U.	\$130,000
Randolph	NS	483 694N	Moberly	W. Carpenter St.	D.U.	\$130,000
Randolph	NS	483 695V	Moberly	Wightman	D.U.	\$130,000

DISTRICT 3:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Audrain	GWWR	293 344W		Mexico	Morris St.	D.Ū.	\$130,000
Audrain	NS	483 626M		Benton City	County Rd. 725	P to A	\$130,000
Audrain	NS	483 627U		Benton City	County Rd. 724	Close	\$0
Audrain	NS	483 630C		Benton City	Route A	D.U.	\$130,000
Audrain	NS	483 643D		Mexico	Morris St.	D.U.	\$130,000
Audrain	NS	483 645S		Mexico	County Rd. 929	P to A	\$130,000
Audrain	NS	483 646Y		Mexico	County Rd. 935	P to A	\$130,000
Audrain	NS	483 648M		Thompson	Main St.	D.U.	\$130,000
Audrain	NS	483 649U		Thompson	County Rd. 951	P to A	\$130,000
Audrain	NS	483 650N		Thompson	County Rd. 957	P to A	\$130,000
Audrain	NS	483 652C		Thompson	County Rd. 963	P to A	\$130,000

DISTRICT 3:

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County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Audrain	NS	483 654R		Thompson	County Rd. 973	P to A	\$130,000
Audrain	NS	483 657L		Centralia	County Rd. 989	P to A	\$130,000
Marion	BNSF	063 537L		Hannibal	Route JJ	D.U.	\$130,000

DISTRICT 4:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Jackson	UP	411 877J	Kansas City	Kansas City	Gennesse St.	D.U.	\$130,000
Jackson	UP	441 942U	Kansas City	Independence	South Ave.	C.U.	\$100,000
Jackson	BNSF	663 541H	Kansas City	Kansas City	Gennesse St.	D.U.	\$130,000
Johnson	UP	442 068J		Montserrat	County Rd. 801	P to A	\$100,000
Johnson	UP	442 085A		Knob Noster	Route FF	C.U.	\$130,000
Lafayette	GWWR	293 554L		Odessa	MO Rt. 131/Second	D.U. – rdwy. Impr.	\$200,000
Ray	BNSF	005 345M		Henrietta	County Rd. 319	P to A	\$130,000
Ray	IMRL	375 486R		Lawson	Garner St.	P to A	\$100,000

DISTRICT 5: (NONE)

DISTRICT 6:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Franklin	BNSF	664 376D	St. Louis	St. Clair	W. Gravois Ave.	P to A	\$100,000

				DISTRICT	7:		
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Barry	BNSF	668 316H		Monett	Eisenhower St.	SEP	\$200,000
Barry	BNSF	673 367D		Monett	Central Ave.	Close	\$0
Bates	MNA	442 049H		Adrian	1 st St.	P to A	\$130,000
Lawrence	BNSF	673 309H		Aurora	County Rd. 1210	P to A	\$130,000
Newton	BNSF	668 369G		Neosho	Washington St.	Close – build rdwy.	\$100,000
Newton	BNSF	668 370B		Neosho	Baxter St.	D.U.	\$100,000
				DISTRICT	8:		
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Greene	BNSF	664 262R	Springfield	Springfield	U.S. 60/U.S. 65	D.Ū.	\$100,000
Webster	BNSF	667 650A	1 0	Diggins	Route NN	D.U.	\$130,000
Webster	BNSF	667 653V		Diggins	Short Rd.	P to A	\$130,000
				DISTRICT	9.		
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Texas	BNSF	667 722B	1411	Cabool	CR 5930/Cannaday	Close	\$0
Texas	BNSF	667 726D		Cabool	Cedar St.	Close	\$0 \$0
Texas	BNSF	667 862D		Cabool	Walnut St.	Close-build rdway.	\$200,000
Texas	BNSF	667 864S		Cabool	Airport Rd.	Close	\$200,000

DISTRICT 10:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
St. Francois	UP	446 412W		Iron Mountain	Bellview St.	P to A	\$130,000
Scott	BNSF	665 642B		Oran	Greer St.	P to A	\$100,000
Stoddard	UP	446 328N		Dexter	Route ZZ	D.U.	\$130,000

DISTRICT 1: (NONE)

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County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Carroll	BNSF	005 302U		Carrollton	County Rd. 708	P to A	\$130,000
Carroll	BNSF	005 311T		Carrollton	County Rd. 636	P to A	\$130,000
Chariton	NS	483 753N		Keytesville	County Rd. 425	P to A	\$130,000
Howard	GWWR	293 420M		Glasgow	15 th St.	Close	\$0
Howard	GWWR	293 421U		Glasgow	8 th St.	Close	\$0
Howard	GWWR	?		Glasgow	?	P to A-Build rdwy.	\$200,000
Randolph	GWWR	293 362F		Clark	Route P/Main	P to A	\$130,000

DISTRICT 3:

County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate
Audrain	GWWR	293 346K		Mexico	County Rd. 929	P to A	\$130,000
Audrain	GWWR	293 347S		Thompson	County Rd. 935	P to A	\$130,000
Audrain	GWWR	293 349F		Thompson	Main St.	D.U.	\$130,000
Audrain	GWWR	293 350A		Thompson	County Rd. 951	P to A	\$130,000
Audrain	GWWR	293 351G		Thompson	County Rd. 957	P to A	\$130,000
Audrain	GWWR	293 353V		Thompson	County Rd. 963	P to A	\$130,000
Audrain	GWWR	293 355J		Thompson	County Rd. 973	P to A	\$130,000
Audrain	GWWR	293 358E		Centralia	County Rd. 989	P to A	\$130,000
Clark	BNSF	005 014A		Medill	Santa Fe St.	P to A	\$130,000

DISTRICT 3:								
Carreter	RR	Cuassinas	MPO	(Cont.)	Doodsway	I	Estimate	
County Marion	RK BNSF	Crossings 063 528M	MPO	City Hannibal	Roadway County Rd. 253	Improvement P to A	\$130,000	
Marion	NS	480 616W		Hannibal	Lindell Ave.	Close-Build rdwy.	\$ 85,000	
Marion	110	400 010 W		Hammoar	Emden 74ve.	Close-Build Idwy.	\$ 65,000	
				DISTRICT 4	:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
Cass	KCS	329 818K		Belton	183 rd St.	P to A	\$130,000	
Clay	IMRL	375 445L		Lawson	174 th St.	P to A	\$130,000	
Jackson	KCS	329 705E	Kansas City	Kansas City	Front St.	P to A	\$130,000	
Jackson	KCS	329 709G	Kansas City	Kansas City	Front St.	P to A	\$130,000	
Jackson	BNSF	663 537T	Kansas City	Kansas City	Mulberry St.	P to A	\$130,000	
Jackson	BNSF	663 538A	Kansas City	Kansas City	Mulberry St.	P to A	\$130,000	
Ray	BNSF	005 347B		Camden	County Rd. 320	P to A	\$130,000	
				DISTRICT 5	:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
Cole	UP	442 661N		Jefferson City	Industrial Dr.	P to A	\$130,000	
Pettis	UP	442 086G		Knob Noster	E. Prairie Grove	P to A	\$130,000	
				DISTRICT 6	:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
St. Charles	BNSF	068 768L	St. Louis	Old Monroe	Dalbow St.	P to A	\$130,000	
St. Louis	UP	425 018L	St. Louis	Webster Groves	Brentwood St.	P to A	\$130,000	
St. Louis City	UP	425 030T	St. Louis	St. Louis	Manchester Ave.	P to A	\$130,000	

DISTRICT 7:								
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
Jasper	MNA	434 857M	Joplin	Joplin	Murphy Blvd.	P to A	\$130,000	
Jasper	BNSF	669 557A	Joplin	Joplin	Murphy Blvd.	P to A	\$130,000	
McDonald	KCS	330 186B		Noel	County Rd.	P to A	\$130,000	
Newton	KCS	330 132V		Neosho	N. Lark St.	Close	\$0	
Newton	KCS	330 133C		Neosho	Sorrel St.	Close	\$0	
Newton	KCS	330 134J		Neosho	S. Lark St.	Close	\$0	
Newton	KCS	?		Neosho	Reynolds Rd. ?	P to A – Build Rdwy.	\$200,000	
				DISTRICT	` 8:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
Greene	MNA	445 056A	Springfield	Springfield	Scenic Dr.	P to A	\$130,000	
Webster	BNSF	667 628M		Fordland	County Rd.	P to A	\$130,000	
				DISTRICT	` 9:			
County	RR	Crossings	MPO	City	Roadway	Improvement	Estimate	
Howell	BNSF	667 844F		Pomona	County Rd. 1820	P to A	\$130,000	
Phelps	BNSF	664 598M		Rolla	7 th St.	D.U.	\$130,000	
Phelps	BNSF	664 599U		Rolla	6 th St.	D.U.	\$130,000	
Phelps	BNSF	664 600L		Rolla	Rolla St.	D.U.	\$130,000	
Phelps	BNSF	664 602A		Rolla	Park St.	Close	\$0	
Phelps	BNSF	664 604N		Rolla	Walker St.	D.U.	\$130,000	

DISTRICT 10:

County	RR	Crossings MPO	City	Roadway	Improvement	Estimate
Stodddard	UP	789 073S	Bell City	County Rd. 340	P to A	\$130,000
Stoddard	UP	789 099U	Dexter	County Rd. 567	P to A	\$130,000
Stoddard	UP	789 114U	Dexter	County Rd. 708	P to A	\$130,000